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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,208	05/19/2005	Steve C Benesi	SCB-03-1-PCT-US	3477

7590
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3123 Indian Way
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EXAMINER

DRODGE, JOSEPH W

ART UNIT	PAPER NUMBER
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1797

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05/12/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,208	Applicant(s) BENESI ET AL.	
	Examiner Joseph W. Drodge	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 39 and 42-74 is/are pending in the application.
- 4a) Of the above claim(s) 60-74 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 39 and 42-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 60-74 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 39 and 42-59 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 of U.S. Patent No. 7,674,386, in view of

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Aigeldinger et al patent 5,558,773, and if necessary Luker patent 6,103,191 and Banerjee patent 6,182,375. The instant method claims substantially recite the same set of limitations as method claims 15-20 of '386. Aigeldinger et al teach to monitor and control temperature as well as pressure Claims 4 and 5 recite dry gas or steam. If necessary, Luker (column 4, lines 17-64 and column 5, lines 12-54 recite temperature control in a system employing belt filters as in '386, while Banerjee at column 9, lines 1-64 recite temperature and pressure control of dewatering and plural dewatering stages.

Claims 39 and 42-59 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for recitation of “dry steam”, does not reasonably provide enablement for recitation of “dry gas”. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to operate the invention commensurate in scope with these claims. Page 17 and other text portions while concerning “hot gas” and “dry steam” does not reasonably support use of any type of “dry gas” as now recited. The recitations of “dry gas” thus constitute New Matter.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 39,42,43,46-49,52-54 and 56-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benesi patent 6,159,359 in view of Luker patent 6,103,191 and Banerjee patent 6,182,375.

Benesi '359 discloses method and apparatus employing a pressure filter apparatus 26 comprising upper plates 44, lower plates 45 having cavities, filter media (column 4, line 61), the filter adapted to seal and pressurize (column 1, lines 50-59), plates being movable (column 1, lines 55-59), media moving means (column 6, lines 48-54), means to introduce fluids into the pressure chamber (column 7, lines 5-9), means to drain or withdraw fluids from the filtering chamber that have passed through the filter media and lower plate (column 6, lines 12-16; also see column 4, lines 32-34 and column 5, lines 60-63), slurry sources 50 and means to

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sense pressure in the chamber (column 7, lines 10-14). Also disclosed are controller means to control pretreatment, plate opening/closing, filter media movement and introduction of fluids (column 5, lines 23-33). Benesi '359 additionally disclose introduction of gases and other wash fluids through the filter, in between processing of batches of slurry (column 3, lines 44-55), sealing of the plates or platens to form internal cavities (column 1, lines 55-65), retaining of a filter cake (column 2, lines 28-30, etc.).

The claims also differ in requiring means to sense both temperature and pressure in the pressurized filtration chamber. Benesi '359 already sensing pressure in such chamber (column 7). However, to have modified the '359 apparatus by providing such temperature sensing would not have constituted an inventive step, since '677 at column 6, lines 14-19, teaches to sense and control chamber temperature to optimize the effect of the pretreatment chemicals. However, Aigeldinger et al teaches to dewater either industrial or sewage sludge slurry in pressurized filtration apparatus that treats and produces batches of filter cake (column 1, lines 10-14 and 45-55 and column 2, lines 22-35). Aigeldinger teaches to control temperatures and pressures in the filtration chambers by monitoring various parameters, including pressures and temperatures inside the filtration chamber (column 6, lines 1-13), especially column 6, lines 5-7). If necessary, Luker (column 4, lines 17-64 and column 5, lines 12-54 recite temperature control in a system employing belt filters as in '386, while Banerjee at column 9, lines 1-64 recite temperature and pressure control of dewatering and plural dewatering stages.

It would have been obvious to the skilled artisan to have also so monitored and controlled temperatures and pressures inside the filtration pressure chamber to better optimize and control the degree of drying of the filter cake.

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For claims 42,43 and 45,48,49 Benesi '359 discloses combinations of dry gas or air at column 7, lines 23-25. For claim 46, hot wash fluid use is inferred at column 7, lines 7-9. Varying of press pressure and temperature is disclosed at column 5, lines 1-20 , hence inferring pre-heating for claim 47. Extra entry and exit ports for claim 59 is suggested at column 7, lines 5-9 and 18-21, as is belt closing and mating of surfaces at column 5, lines 54-64 for claim 58. Sealing necessarily occurs for claim 58 in order to achieve the recited high pressures disclosed in Benesi and Aigeldinger.

Aigeldinger suggests pre-heating and temperature control of introduced hot gas for claim 52 at column 3, lines 17-22, the recited pressures and temperatures for claims 53 and 54 at column 3, lines 24-42, monitoring of pressure, temperature and other cake-forming condition (condensate amount) for claims 56-57.

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benesi patent 6,159,359 in view of Luker patent 6,103,191 and Banerjee patent 6,182,375 as applied to claims 39,42,43,46-49,52-54 and 56-59 above, and further in view of Kramer et al patent 4,995,972. Kramer teaches the use of cooling gas for cooling the filter cake of a filter press in order to facilitate cake removal (see column 7, lines 13-23) as required by claim 50.

Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benesi patent 6,159,359 in view of Luker patent 6,103,191 and Banerjee patent 6,182,375 as applied to claims 39,42,43,46-49,52-54 and 56-59 above, and further in view of Bratten patent 5,209,841. Bratten teaches use of a system to recirculation of at least a portion of the water removed during dewatering using pressure filters (column 5, lines 1-10) for water conservation purposes as required by claim 51.

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Claims 44 and 50 would be allowable if rewritten to overcome the rejection(s) under Obviousness Double patenting set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Although these claims are rejected under double patenting, they are deemed to distinguish in view of respective recitations of initial analysis of slurry to be separated in order to determine or select the order of types of drying gases to be applied.

Applicant's arguments, with respect to the rejection(s) of claim(s) under Benesi patent 5,462,677 alone or in combination with Benesi patent 6,159,359 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Benesi '359 in combination with various other newly applied prior art. Therefor the arguments made in response to the Final Rejection of 12/08/2009 are moot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at his direct government telephone number of 571-272-1140. The examiner can normally be reached on Monday-Friday from approximately 8:00 AM to 1:00PM and 2:30 PM to 5:30 PM.

Alternatively, to contact the examiner, send a communication via E-mail communication to the Examiner's Patent Office E-mail address: "Joseph.Drodge@uspto.gov". Such E-mail communication should be in accordance with provisions of MPEP (Manual of Patent Examination Procedures) section 502.03 & related MPEP sections. E-mail communication must begin with a statement authorizing the E-mail communication and acknowledging that such

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communication is not secure and will be made of record, under Patent Internet Usage Policy Article 5. A suggested format for such authorization is as follows: "Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file.

Additionally, the examiner's supervisor, Duane Smith, of Technology Center Unit 1797, can be reached at 571-272-1166.

The formal facsimile phone number, for official, formal communications, for the examining group where this application is assigned is 571-273-8300. The facsimile phone number for informal communication directly with the examiner is 571-273-1140.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

5/8/2010

/Joseph W. Drodge/

Primary Examiner, Art Unit 1797